

AMENDMENTS TO THE CLAIMS:

Claims 1-33 were allowed in the Notice of Allowance.

Claims 11-20 and 31-32 are amended.

Claims 1-33 remain pending.

1. (Previously Presented) A method for sharpening one or more bands of sensor data, the method comprising:

receiving blue, green, red, near-infrared, and panchromatic bands of data;

converting the received blue, green, red, near-infrared, and panchromatic bands of data to power-format;

correcting data of the converted power-formatted panchromatic band based on the received blue, green, red, and near-infrared bands of data; and

sharpening the data of one or more of the green, red, and near-infrared bands based on the corrected data of the panchromatic band.

2. (Original) The method of Claim 1, further comprising combining the sharpened data of the green, red, and near-infrared bands with the received panchromatic band of data.

3. (Original) The method of Claim 2, further comprising generating an image based on the combined data and displaying the generated image.

4. (Previously Presented) A method for sharpening one or more bands of sensor data, the method comprising:

receiving blue, green, red, near-infrared, and panchromatic bands of data;

converting the received blue, green, red, near-infrared, and panchromatic bands of data to power-format;

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sharpening the converted power-formatted data of the green, red, and near-infrared bands based on the received panchromatic band of data; and
correcting the power-formatted data of the panchromatic band based on the sharpened power values for the data of the green, red, and near-infrared bands; and
sharpening the data of one or more of the green, red, and near-infrared bands based on the corrected data of the panchromatic band.

5. (Original) The method of Claim 4, wherein correcting the power-formatted data is further based on width and gap information of the blue, green, red, and near-infrared bands.
6. (Original) The method of Claim 4, wherein correcting data of the panchromatic band further includes resizing the data of the blue, green, red, and near-infrared bands to match resolution of the data of the panchromatic band prior to converting the received blue, green, red, near-infrared, and panchromatic bands of data to the power-format.
7. (Original) The method of Claim 4, wherein converting includes converting the data of the blue, green, red, and near-infrared bands into radiance values and converting the radiance values to the power-format.
8. (Original) The method of Claim 7, wherein converting the radiance values to the power-format is based on upper and lower width limits of the blue, green, red, and near-infrared bands.
9. (Original) The method of Claim 1, further comprising subtracting power of the corrected pan band from power of the original pan band to form a band of data.
10. (Original) The method of Claim 1, wherein the blue, green, red, near-infrared, and panchromatic bands of data are generated by one of an aircraft or satellite sensing system.

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11. (Currently Amended) A computer-readable medium embodied with a computer program for sharpening one or more bands of sensor data in the visual spectrum, the ~~computer program product~~ computer-readable medium comprising:

first computer program code means for receiving blue, green, red, near-infrared, and panchromatic bands of data;

second computer program code means for converting the received blue, green, red, near-infrared, and panchromatic bands of data to power-format;

third computer program code means for correcting data of the panchromatic band based on the received blue, green, red, and near-infrared bands of data; and

fourth computer program code means for sharpening the data of one or more of the green, red, and near-infrared bands based on the corrected data of the panchromatic band.

12. (Currently Amended) The ~~computer program product~~ computer-readable medium of Claim 11, further comprising fifth computer program code means for combining the sharpened data of the green, red, and near-infrared bands with the received panchromatic band of data.

13. (Currently Amended) The ~~computer program product~~ computer-readable medium of Claim 12, further comprising six computer program code means for generating an image based on the combined data and a means for displaying the generated image.

14. (Currently Amended) A computer-readable medium embodied with a computer program for sharpening one or more bands of sensor data in the visual spectrum, the ~~computer program product~~ computer-readable medium comprising:

first computer program code means for receiving blue, green, red, near-infrared, and panchromatic bands of data;

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second computer program code means for converting the received blue, green, red, near-infrared, and panchromatic bands of data to power-format;

third computer program code means for sharpening the converted power- formatted data of the green, red, and near-infrared bands based on the received panchromatic band of data;

fourth computer program code means for correcting the power-formatted data of the panchromatic band based on the sharpened power values for the data of the green, red, and near-infrared bands; and

fifth computer program code means for sharpening the data of one or more of the green, red, and near-infrared bands based on the corrected data of the panchromatic band.

15. (Currently Amended) The ~~computer program product~~ computer-readable medium of Claim 14, wherein the fourth computer program code means corrects the power-formatted data further based on width and gap information of the blue, green, red, and near-infrared bands.

16. (Currently Amended) The ~~computer program product~~ computer-readable medium of Claim 14, wherein the fourth computer program code means further includes a sixth computer program code means for resizing the data of the blue, green, red, and near-infrared bands to match resolution of the data of the panchromatic band prior to converting the received blue, green, red, near-infrared, and panchromatic bands of data to power-format.

17. (Currently Amended) The ~~computer program product~~ computer-readable medium of Claim 14, wherein the second computer program code means includes a sixth computer program code means for converting the data of the blue, green, red, near-infrared, and panchromatic bands into radiance values and a seventh computer program code means for converting the radiance values to the power-format.

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18. (Currently Amended) The ~~computer program product~~ computer-readable medium of Claim 17, wherein the second computer program code means converts the radiance values to the power-format based on upper and lower width limits of the bands.

19. (Currently Amended) The ~~computer program product~~ computer-readable medium of Claim 11, further comprising fifth computer program code means for subtracting power of the corrected pan band from power of the original pan band to form a band of data.

20. (Currently Amended) The ~~computer program product~~ computer-readable medium of Claim 11, wherein the blue, green, red, near-infrared, and panchromatic bands of data are generated by one of an aircraft or satellite sensing system.

21. (Previously Presented) A system for sharpening one or more bands of sensor data, the system comprising:

- a processor coupled to the input interface, the processor including:
 - a first component configured to receive blue, green, red, near-infrared, and panchromatic bands of data;
 - a second component configured to convert the received blue, green, red, near-infrared, and panchromatic bands of data to power-format;
 - a third component configured to correct data of the panchromatic band based on the blue, green, red, and near-infrared bands of data;
 - a forth component configured to sharpen the data of one or more of the green, red, and near-infrared bands based on the corrected data of the panchromatic band;
 - a fifth component configured to combine the sharpened data of the green, red, and near-infrared bands with the received panchromatic band of data; and
 - a display device coupled to the processor configured to display an image based on the combined data.

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22. (Previously Presented) A system for sharpening one or more bands of sensor data, the system comprising:

a processor coupled to the input interface, the processor including:

a first component configured to receive blue, green, red, near-infrared, and panchromatic bands of data;

a second component configured to convert the received blue, green, red, near-infrared, and panchromatic bands of data to power-format;

a third component configured to sharpen the converted power-formatted data of the green, red, and near-infrared bands based on the received panchromatic band of data; and

a fourth component configured to correct the power-formatted data of the panchromatic band based on the sharpened power values for the data of the green, red, and near-infrared bands;

a fifth component configured to sharpen the data of one or more of the green, red, and near-infrared bands based on the corrected data of the panchromatic band;

a sixth component configured to combine the sharpened data of the green, red, and near-infrared bands with the received panchromatic band of data; and

a display device coupled to the processor configured to display an image based on the combined data.

23. (Previously Presented) The system of Claim 22, wherein the fourth component corrects the power-formatted data further based on width and gap information of the blue, green, red, and near-infrared bands.

24. (Previously Presented) The system of Claim 22, wherein the fourth component further includes a seventh component configured to resize the data of the blue, green, red, and near-infrared bands to match resolution of the data of the panchromatic band prior to converting the received blue, green, red, near-infrared, and panchromatic bands of data to the power-format.

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25. (Previously Presented) The system of Claim 22, wherein the second component includes a seventh component configured to convert the data of blue, green, red, and near-infrared bands into radiance values and an eighth component configured to convert the radiance values to the power-format.

26. (Previously Presented) The system of Claim 25, wherein the eighth component converts the radiance values to the power-format based on upper and lower width limits of the respective band.

27. (Previously Presented) The system of Claim 21, wherein the processor includes a sixth component configured to subtract the corrected pan band power from original pan band power to form a band.

28. (Original) The system of Claim 21, wherein the blue, green, red, near-infrared, and panchromatic bands of data are generated by one of an aircraft or satellite sensing system.

29. (Previously Presented) A method for sharpening one or more bands of sensor data, the method comprising:

receiving a plurality of first bands of data at a first resolution level, and a second band of data at a second resolution level, wherein the plurality of bands of data are included within the second band and the first resolution level is less than the second resolution level;

converting the first and second bands of data to power-format;

correcting data of the second band based on power values of the first and second bands of data; and

sharpening the data of one or more of the plurality of first bands based on the corrected data of the second band.

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30. (Previously Presented) A method for sharpening one or more bands of sensor data, the method comprising:

receiving a plurality of first bands of data at a first resolution level, and a second band of data at a second resolution level, wherein the plurality of bands of data are included within the second band and the first resolution level is less than the second resolution level;

converting the first and second bands of data to power-format;
correcting data of the second band based on power values of the first and second bands of data; and

sharpening the data of one or more of the plurality of first bands based on the corrected data of the second band, wherein correcting includes:

determining power values for gaps between each of the plurality of first bands of data;

determining a total power value for the second band of data; and
removing the determined power values for gaps between each of the plurality of first bands of data from the determined total power value for the second band of data.

31. (Currently Amended) A computer-readable medium embodied with a computer program for sharpening one or more bands of sensor data in the visual spectrum, the ~~computer program product~~ computer-readable medium comprising:

first computer program code means configured to receive a plurality of first bands of data at a first resolution level, and a second band of data at a second resolution level, wherein the plurality of bands of data are included within the second band and the first resolution level is less than the second resolution level;

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second computer program code means configured to convert the first and second bands of data to power-format;

third computer program code means configured to correct data of the second band based on power values of the first and second bands of data; and

fourth computer program code means configured to sharpen the data of one or more of the plurality of first bands based on the corrected data of the second band.

32. (Currently Amended) The ~~computer program product~~ computer-readable medium of Claim 31, wherein the third computer program code means includes:

fifth computer program code means configured to determine power values for gaps between each of the plurality of first bands of data;

sixth computer program code means configured to determine a total power value for the second band of data; and

seventh computer program code means configured to remove the determined power values for gaps between each of the plurality of first bands of data from the determined a total power value for the second band of data.

33. (Previously Presented) A system for sharpening one or more bands of sensor data, the system comprising:

a processor coupled to the input interface, the processor including:

a first component configured to receive a plurality of first bands of data at a first resolution level, and a second band of data at a second resolution level, wherein the plurality of bands of data are included within the second band and the first resolution level is less than the second resolution level;

a second component configured to convert the first and second bands of data to power-format;

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a third component configured to correct data of the second band based on the power values of the first and second bands of data;

a fourth component configured to sharpen the data of one or more of the plurality of first bands based on the corrected data of the second band; and

a fifth component configured to combine the sharpened data with the second band of data.

a display device coupled to the processor configured to display an image based on the combined data.

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